

ABSTRACT

A thin-wall PTFE (polytetrafluoroethylene) tube in the form of a tube of porous expanded PTFE film wherein the porous PTFE film has a microstructure containing a multiplicity of fibrils oriented substantially parallel to each other. The tube has a wall thickness of less than about 0.25 mm and is made from at least one first layer and at least one second layer of porous PTFE film, wherein the fibrils of the first and second layers are oriented substantially perpendicular to each other. Preferably the fibrils of the at least one first layer are oriented substantially parallel to the longitudinal axis of the tube and the fibrils of the at least one second layer of porous PTFE film are oriented substantially circumferential to the tube. The first and second layers may be inner and outer layers respectively, or alternatively their relationship may be reversed. Alternatively, either of the first and second film layers may be replaced with alternative reinforcing components such as a braid or at least one reinforcing rib. The reinforcing rib is preferably in the form of a helically-wrapped metal wire located between the first and second layers.